

**INSTRUCTION MANUAL****MODEL 392 AM-FM TUNER****INSTALLATION AND OPERATION INSTRUCTIONS**

Model 392 is a Hi Fidelity ultra-sensitive AM-FM Tuner complete with AFC and should be used in connection with a high-grade high-fidelity audio amplifier. The Tuner has an audio output jack and an additional jack for attachment to a Multiplex Converter. An AC receptacle is located on the rear of the chassis to supply power to an amplifier or other component. The auxiliary equipment connected into the AC receptacle is controlled by the ON-OFF switch so that turning off the amplifier, turns off all equipment.

**UNPACKING:**

The unit is to be removed carefully from the carton and inspected for any possible damage in transit. If there is any evidence of any damage which might have occurred in shipment, notify your dealer at once, or the transportation company which delivered it. Claims for damage sustained in transit must be made upon the Carrier. Save all packing material for inspection by the claim agent who will furnish you with the proper forms and will also, give you the necessary instructions for filing a claim. In addition to the Unit, there should be included in the carton the following:

1. INSTRUCTION BOOKLET
2. WARRANTY CARD

To insure proper servicing and to protect your rights under the warranty, be sure to fill in the warranty registration card without delay and mail to the factory.

**WARRANTY**

Your RAYMER unit has been very carefully inspected and tested at the factory and normally should require no service other than a semi-annual check of the tubes. Each unit is warranted to be free from defects in material and workmanship under normal use and service for a period of 90 days from date of delivery to the original purchaser. If any unit appears to be defective, the factory will repair any unit returned within said 90 days, providing all transportation charges are pre-paid, and which our examination shall disclose to our satisfaction to be defective.

This Warranty does not include free labor, nor is it applicable to any unit which shall have been subject to accident, tampered with, mis-used, abused, or altered in any manner whatsoever. Further, this Warranty shall not apply to any unit which has been connected improperly.

It is recommended that any Tuner on which service is required, be processed through your dealer wherever possible.

This Warranty is expressly in lieu of all other Warranties, expressed or implied, and of all other obligations or liabilities on our part. We neither assume nor authorize any other person to assume for us any other liability in connection with the products manufactured by Trutone Electronics, Inc.

**INSTALLATION:**

Because of its attractive appearance, the Tuner may be placed on a table or a bookshelf. If installed in a cabinet, the cover is to be removed, and ample ventilation must be allowed. Model 392 Tuner is designed to operate on a 110 to 120 volt, 60 cycle A.C. line.

**TRUTONE ELECTRONICS, INC.**

14660 Raymer St. • Van Nuys, Calif.

All connections are provided on the rear of the unit. One end of a proper patch cord is to be connected into the audio jack and the other end inserted in the input jack of the audio amplifier, which is usually designated as a "Radio" or "Tuner". The Multiplex jack can be used for connecting to a Multiplex Converter to receive simultaneous signals on both FM and Multiplex broadcast, and for Multiplex Stereo Reception. The unit is to be plugged either in the rear of the amplifier or in the event the amplifier does not have an A.C. receptacle, insert in any 110 volt A.C. outlet.

The front of the Tuner has three operating controls; the slide switch in the center is to turn the set on by placing the switch to the "ON" position; the knob at the left controls the various functions and can be turned for either AM, or FM reception, or for FM with "AFC"; the knob at the right is used to tune the desired station for either AM, or FM reception.

AFC refers to "Automatic Frequency Control" and is an electronic means of keeping the receiver properly tuned to the F.M. broadcasting station. It should be used only when the selector knob is set for F.M. reception. Even if the Tuner Pointer is not in the exact center of the channel, the AFC will automatically pull in the signal to the proper point. However, in tuning in a weak station adjacent to a stronger one, if the AFC is in operation position, it may "lock on the stronger signal". It is for this reason that a means has been provided for disabling the AFC. This is accomplished by using the left hand knob as indicated below.

For normal operation, the left hand knob should be placed at "FM-AFC" position. For very precise tuning or for tuning a weak station next to a powerful station on FM, it is suggested that the left hand knob be placed in the "FM" position until the station is received the loudest. The knob is then to be moved to the "FM-AFC" position and the station will be properly tuned and locked in position.

For normal F.M. reception, a built-in line cord antenna is sufficient for most locations. In the event that the unit is located in a remote area, an external Dipole antenna will increase the efficiency and a number of distant stations can then be received. This external antenna is to be connected across the terminals marked "ANT" and "GND".

For A.M. reception, Model 392 has a built-in Hi Q Ferrite loopstick antenna which is all that is normally required for most A.M. reception.

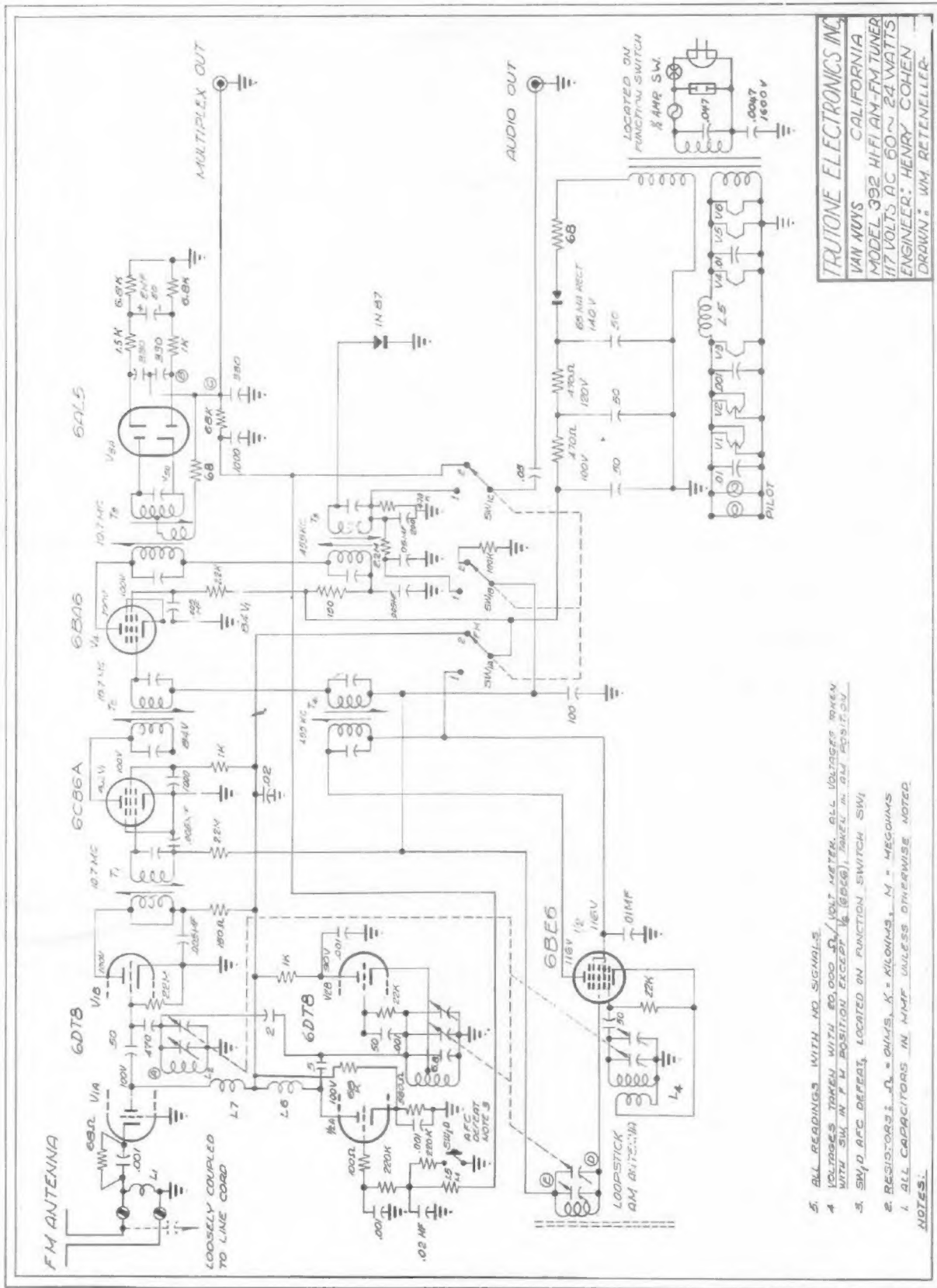
To increase the reception of the weak A.M. stations in the fringe area, it may be advisable to rotate the Tuner to obtain the loudest signal.

The center marking on the dial glass is a "LOG" scale for easy recording of the position of the pointer for any specific station.

#### CAUTION

This unit is provided with a 1/2 ampere fuse for the protection of the components used in the circuitry. If the fuse should blow, replace it with one of identical amperage and under no circumstances with one of greater amperage. If the replacement fuse should blow, replace the rectifier, which normally will correct the difficulty. If the fuse continues to blow out even with a new rectifier, return the amplifier to the factory for warranty repair or replacement.





5. ALL READINGS WITH NO SIGNALS.

4. VOLTAGES TAKEN WITH 50,000  $\Omega$  VOLT METER. ALL VOLTAGES TAKEN WITH SW. IN P.M. POSITION EXCEPT V<sub>2</sub> (6BD5) TAKEN IN 0.1V POSITION.

3. SW. D. AFC DEFECT, LOCATED ON FUNCTION SWITCH SW.

2. RESISTORS:  $\Omega$  - OHMS, K - KILOHMS, M - MEGOHMS

1. ALL CAPACITORS IN MMF UNLESS OTHERWISE NOTED.

TRU-TONE ELECTRONICS INC.  
VAN NUYS CALIFORNIA  
MODEL 392 HI-FM-FM TUNER  
117 VOLTS AC 60~24 WATTS  
ENGINEER: HENRY COHEN  
DRAWN: WM. RETENELLER